Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

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Volume 4, Number 12 **BOSTON, MASSACHUSETTS** **December, 1937**

Thrills of fire fighting in 1871, like the response of this horse-drawn steamer, are highlighted in the 20th Century-Fox motion picture, "In Old Chicago."

"In Old Chicago"

Anniversary of 1871 Conflagration Famed as Fire Prevention Week —Now the Great Disaster Is Put in Picture by 20th Century-Fox

THE anniversary of the great Chicago conflagration of October 9, 1871, is observed each year in Fire Prevention Week and Mrs. O'Leary's cow, reputed to be the cause of the fire, has become symbolic of the every day carelessness against which our fire prevention efforts are directed. This great disaster has now been immortalized in the new 20th Century-Fox motion picture entitled "In Old Chicago," which will be released shortly after the first of the year. Leading roles will be played by such notable stars as Tyrone Power, Alice Faye and Don Ameche.

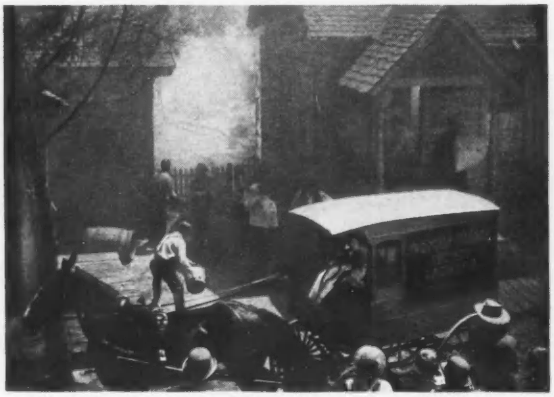
The producers have faithfully reproduced not only the buildings and costumes of the period, but went to great trouble to assemble many pieces of old fire apparatus so that the fire fighting conditions could be truly represented. Three great sets of buildings were erected and many of them were burned during the making of the picture at a cost of some $500,000. One of these sets comprised ten city blocks, another showed five blocks on the Chicago lakefront and a third represented the slum section of old Chicago in which the fire started. The picture shows the fire starting in an old fire trap building, and how devastation is spread through the wind and sparks on wooden shingle roofs causing fire fighters to battle against overwhelming odds.

20th Century-Fox Portrays Great Chicago Conflagration

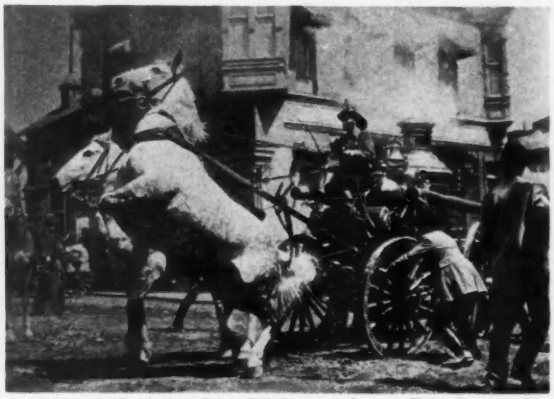
While Firemen Were Delayed Neighbors Were Unable to Prevent Spread of Flames Starting in Mrs. O'Leary's Barn in "The Patch," a Slum Section of Old Chicago

Dwellers in "The Patch," slum section of old Chicago, fighting the fire in Mrs. O'Leary's barn at the rear of her home on DeKoven Street, while awaiting firemen.

Bucketsful of water were of no avail against flames feeding on structures tinder-dry from a long drought. A strong wind spread burning brands to nearby wooden roofs.



Mrs. O'Leary escaped from her home as flames ignited the rear of dwellings on DeKoven Street. These houses are said to be exact replicas of the originals.



A fire lookout made a fatal error in sending fire equipment to a location two miles from the actual blaze. Unpaved streets also slowed up the response.

Volunteer firemen responding to the Chicago fire with hand engines. This may be a bit of romancing in the picture as in 1871 Chicago had a paid fire department with 17 steamers and 4 ladder companies.

Firemen are shown attacking the fire on DeKoven Street. Wooden sidewalks which were common throughout the city greatly aided the spread of the fire, frequently igniting from burning shingles carried by the wind.

Drought, Gale and Tinder Roofs Destroyed Chicago

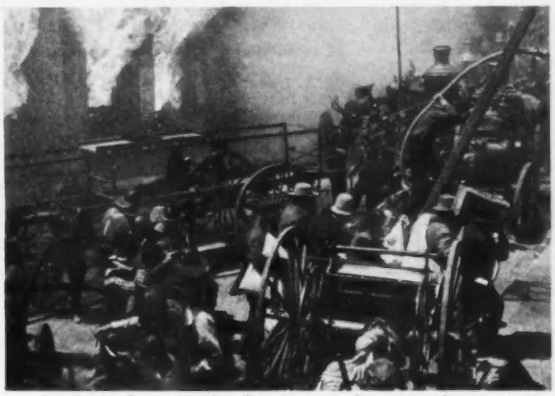
High Winds Carrying Burning Embers Rapidly Spread Fire throughout the City Driving Thousands of Homeless Refugees to the Lakefront

When the wooden shingle roof on the church at the left of the picture ignited, the fire began to get ahead of the fire department which was thereafter in retreat.

When it was realized that the fire was beyond control residents began to flee with what few belongings they could carry. Much looting was reported.

The terrific gale fanned the fire on the heels of the fleeing populace. Conveyances of any sort were at a premium as householders sought to save their goods.

Nearly 300 persons lost their lives, many of whom were trapped before aware that the fire was upon them. A trapped occupant is shown jumping into a life net.



Again and again the firemen made a stand only to be forced back as sparks carried fire to wooden roofs beyond. Finally the wooden roof of the waterworks pumping station took fire and the fight ended.

As the flames raged uncontrolled thousands of persons sought refuge at the lakefront where the shore was piled high with household goods. Many persons entered the water to escape the terrific heat.

New National Electrical Code

1937 Edition of N.F.P.A. Wiring Rules Out—These Regulations Have Made Possible Widespread Safe and Economical Electrical Service

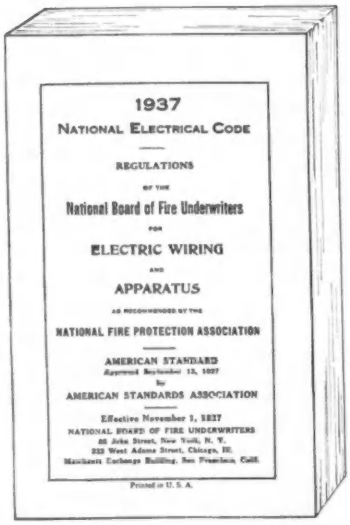
By Victor H. Tousley
Electrical Field Engineer
National Fire Protection Association

THE National Fire Protection Association presents a new edition of the National Electrical Code, prepared by its Electrical Committee. This 1937 edition is of special significance since it will more or less automatically become the law for electric wiring in thousands of cities in the United States and also in many jurisdictions where electric wiring is regulated by the state government. In fact, it will be enforced wherever electric wiring is used since the National Electrical Code is also the basis of underwriters' requirements and is followed as good practice by manufacturers and electrical contractors even where there is no specific local regulation of electric wiring.

The National Electrical Code is only one of some 115 similar standards produced by the N.F.P.A. Few of these other standards, however, have a more far-reaching effect. The National Electrical Code has made for the widespread use of electricity under safe conditions. Furthermore, uniformity of electric requirements has done much to make electrical power and light available to every home and place of business in the country at economical cost.

FROM the fire department point of view, electrical fires are a well known problem. According to the N.F.P.A. Department of Fire Record, to electrical fires in the United States and Canada may be attributed a greater fire loss than to any other single cause. In 60,600 fires of electrical origin last year losses amounted to $29,120,000. Losses from electrical fires led the list even though there were nearly twice as many fires due to careless smoking. Again from the firemen's point of view, electrical fires may be more serious than others when they start in wiring in partitions and other concealed spaces. In such locations they may often spread beyond control before being discovered.

Balanced against this must be placed the following figures on the amount of electricity used. In the United States alone, the annual consumption of electricity amounted to over one trillion kilowatt hours. That is a tremendous



amount of "juice." Obviously there has been some constructive force at work to make this tremendous power consumption possible without unreasonable hazard to life or property. In view of this large consumption of electricity, it is possible for any person to have electricity installed in his home or place of business with assurance that it is the safest form of light, heat and power. To this result, we owe the effectiveness of the National Electrical Code rules.

THE National Electrical Code is not a textbook by which amateurs may become electricians, but is primarily a guide for the use of men who by training and experience are competent to install electric wiring and equipment.

The 1937 edition of the Code is a complete revision, especially as to form. There is a new arrangement of chapters in the 1937 edition and new explanatory material has been added to give specific illustrations of the application of various rules. Where, for example, there might be difficulty in interpreting a rule, the correct practice is illustrated by a typical example. Tables, diagrams and examples have been brought together in a single chapter, whereas they were formerly scattered throughout the Code.

THE National Electrical Code is not an arbitrarily drafted set of rules but represents the consensus of opinion of the members of the N.F.P.A. Electrical Committee. Every provision of the Code is carefully and painstakingly reviewed with each revision. To assure everybody a chance to make suggestions for Code provisions, the Code is presented at the N.F.P.A. annual meeting before final adoption. No less than 34 great national organizations, interested and expert in electrical problems, participate in the work of the Electrical Committee. To mention only a few of them, these are organizations such as the American Institute of Electrical Engineers, the Edison Electric Institute, the International Association of Electrical Inspectors, the National Board of Fire Underwriters, National Bureau of Standards, the National Electrical Contractors Association, the National Electrical Manufacturers Association, Radio Manufacturers Association, and Underwriters' Laboratories, Inc.

THIS distinguished committee attempts to make the Code rules keep pace with electrical development. This has been done over a period of 40 years since 1897. Every two years a new edition is issued incorporating advances in electrical wiring practice which have become recognized as sound and safe. You may call upon the N.F.P.A. Electrical Field Service in connection with problems relating to the adoption of local wiring regulations. If your community does not now have regulation of electric wiring installations, write me for suggestions as to how to go about setting up electrical inspection service and local electric wiring regulations. Please note that the N.F.P.A. Electrical Office is in Chicago rather than at the N.F.P.A. headquarters in Boston. Address: Victor H. Tousley, Electrical Field Engineer, National Fire Protection Association, 612 North Michigan Avenue, Chicago, Ill.

Rural Losses $225,000,000 Yearly

Farmers Can Secure Safety from Fire by Measures Such As Fire Safe Roofs, Water and Fire Fighting Equipment

By Dr. David J. Price
U. S. Department of Agriculture
Chairman N.F.P.A. Committee on Farm Fire Protection

TAKE out your watch and hold it in your hand. Watch the tiny hand tick off a full minute. Then reflect that in that minute, someone on a farm or in a rural community was the victim of a $400 fire loss.

That's a graphic way of understanding that the total fire loss in the United States of farm and rural communities mounts close to $225,000,000 every year. Fires on farms cost more than $100,000,000 annually. Fires in rural communities of 2,500 population and under add $125,000,000 more to this amazing waste. Approximately 3,500 lives are the toll to humanity. But more interesting to the farmer is the fact that the annual loss by fire on farms alone would build 40,000 new farm homes at $2,500 each—or 50,000 brand new barns.

The responsibility rests with the farmer himself. He must be his own fireman, fire chief and fire inspector. More than that, he must be his own building inspector and zoning officer. Studying his proper course in the fulfilling of these duties, he will find that he can reduce fire hazards on his property to a minimum. In this work, the National Fire Protection Association stands ready to help by providing information gained after long research.

-MANY A WOOD SHINGLE ROOF FIRE HAS BEEN CAUGHT IN TIME ONLY BECAUSE A LADDER WAS AVAILABLE -
$400. FIRE LOSS
BARNS WITH HAY AND STRAW SHOULD BE AT LEAST 100 FEET FROM HOUSE -
•EVERY MINUTE OF THE DAY SOMEONE ON A FARM OR RURAL COMMUNITY IS THE VICTIM OF A $400 FIRE.
1/2 OF FARM FIRES ARE CAUSED THROUGH FAULTY CHIMNEY CONSTRUCTION AND WOOD SHINGLE ROOFS -
BE CAREFUL IN THE HANDLING OF LAMPS -

THE barns, in which hay and straw are used, should be separated by at least 100 feet, preferably 150 feet, from the house. Non-combustible or fire-resistant construction materials should be used as far as possible.

Wherever possible, the buildings should be arranged so that prevailing winds blow at right-angles to a line connecting house and barn, rather than parallel to such a line.

Exclusive of the losses ascribed to unknown causes, overheated and defective chimneys and flues, sparks on roofs, and lightning are responsible for approximately 56 per cent of the total losses from farm fires. Stoves and furnaces should be properly installed and operated. Frequent inspection must be made of chimneys to keep them clear of sooty accumulations. Fire-resistant roofing should be used wherever possible, especially on the principal buildings. On days of high wind and strong draft, soot accumulations result in sparks that are a constant menace to the wooden shingle roof. Fire-resistant roofing also eliminates the danger of flying brands from burning wood shingles that carry fire so readily to nearby buildings.

Protection against lightning by means of a system of grounded conductors should be an integral part of protection on the farm. Care in the operation of stoves and furnaces, in the handling of lamps, proper storing of kerosene and gasoline, the disposal of ashes, even when they appear to be dead, the systematic disposal of rubbish are other factors in cutting down the huge and unnecessary fire loss. Fire-stopping—the closing of all open spaces in hollow walls at the floor line so that the fire will not spread quickly from one story to another—is an important phase of the construction of the farm house.

The storage of hay before it is well cured has caused many barn fires through spontaneous ignition. Spontaneous ignition unquestionably is responsible for a great percentage of the fires which are reported as "origin unknown."

Community fire protection in rural districts has proved its worth and such organizations are increasing rapidly. However, it is still true that primary responsibility for fire on his farm rests on the farmer. Hand-force pumps and hose should be kept on hand to guard against the dangers of a spark-catching roof and the farmer should have fire extinguishers ready for immediate use.

Ask the editor of your newspaper if he would like to publish this page. We will furnish a mat of the cartoon upon request.

It looked as though the Lukens Milling Company plant at Atchison, Kansas, was a "goner" when firemen first got to work following a dust explosion on the top floor. The fire department made a good stop largely holding the loss to the top floors. The picture is also interesting because it shows the limitations of hand lines directed from the street level toward fire in the upper floors of a building.

Dust Explosion Fires Mill

FIREMEN in Atchison, Kansas, had a tough job on their hands recently when they pulled in to a big blaze in the Lukens Milling Company plant. Flames and smoke were rolling from the top floor of the mill and for a while it looked as though the entire 4 story brick structure would go. Competent observers credit the Atchison boys with making a good stop.

The fire started about 8:30 A.M. while the plant was in operation. A dust explosion in a machine on the top floor flashed the fire over the floor so rapidly that employees had difficulty in escaping. There was no opportunity to determine the cause.

Nine hose streams were used to extinguish the fire. Three streams were supplied by pumpers and the others were direct lines from a 12-inch main supplying 100 pounds pressure. Due to the headway of the fire the top floor of the building was destroyed. Considerable damage also resulted on the second and third floors where the descent of the fire was stopped. Practically all of the machinery on the three top floors was destroyed but that on the first floor was only slightly damaged by water.

The fire did not get into the rear part of the plant used for grain storage and did not communicate with adjoining buildings. The loss to the building and equipment was $120,000 and to stock $24,000, or a total of $144,000.

Vision of Fire
By May Lewis

On this cold day:
A fire blazing against snow
Far away.
I see it across gray water
In a heavy world devoid of leaven.
It cannot be looked at with calm.
It is magnificently golden and gay
And burst from the sodden earth
Like a sudden door into heaven.

Volunteers in the "Big City"

IT SEEMS like a far cry to the old days when New York City was protected by volunteer fire companies instead of the modern army of thousands of professional fire fighters of the largest fire department in the world.

Last month 5 of 7 remaining volunteer companies, all located on Staten Island, Borough of Richmond, were disbanded upon the organization of Engine Co. 164 and Truck Co. 84 of the paid New York Fire Department. That there were any volunteer fire companies at all in New York City is probably a surprise to many.

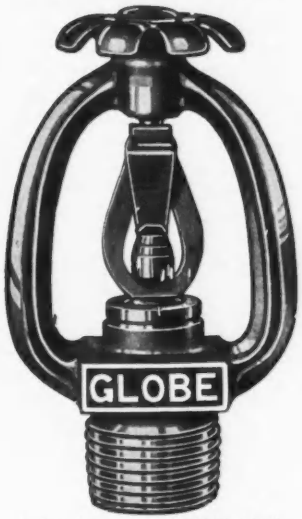
The faithful, unassuming service of the volunteer companies within the limits of the "big city" might have gone unnoticed but for an announcement in *The Chief*, the popular newspaper of the civil service professions, to the effect that all volunteer fire protection in the metropolis had been terminated. In answer to this announcement came the indignant reply to the editor that two volunteer units are still carrying on. These are the Richmond Engine Co. No. 1 and the Oceanic Hook and Ladder Co. of Travis.

Volunteer fire companies have had an important place in the fire protection of most of our large cities. In most, they formed the original organized fire protection. In later times, as in New York City, volunteer firemen protected the outlying areas until the paid department was developed to cover the entire municipality. During the World War when shortage of manpower caused the withdrawal of paid firemen into the high value districts of New York City, many paid companies were temporarily reverted to what was partly at least, a volunteer status. Hats off to the volunteers of Staten Island with whom the old traditions survive!

PROGRESSIVE OFFICIALS AND FIREMEN OF A COMMUNITY KNOW

That a property protected with AUTOMATIC SPRINKLERS

GLOBE SAVEALL AUTOMATIC SPRINKLER



The Automatic FIREMAN

Is No Longer a Fire Menace to Surrounding Buildings.

Is a Barrier to the Spread of Fire or Conflagration.

Has Reduced to a Reasonable Degree Any Demand Upon Public Fire Extinguishing Facilities —

Jeopardy of Fire Department Personnel —

Running and Use of Fire Department Apparatus —

Fire Demand Upon the Town Water Supply, Fire Hydrants, etc.

ALL PUBLIC BENEFITS DEMONSTRATING
THAT PRIVATE FIRE PROTECTION IS TRULY PUBLIC PROTECTION

and

THE PROGRESSIVE BUSINESS MAN SHOULD BE

ENCOURAGED

TO INSTALL GLOBE AUTOMATIC SPRINKLERS

PROVEN QUALITY PROTECTION THAT AUTOMATICALLY

DISCOVERS—ALARMS—EXTINGUISHES FIRE

WITH MINIMUM USE OF WATER AND FIRE DEPT., ALSO DAMAGE AND BUSINESS INTERRUPTION

THEY PAY FOR THEMSELVES

GLOBE AUTOMATIC SPRINKLER COMPANY

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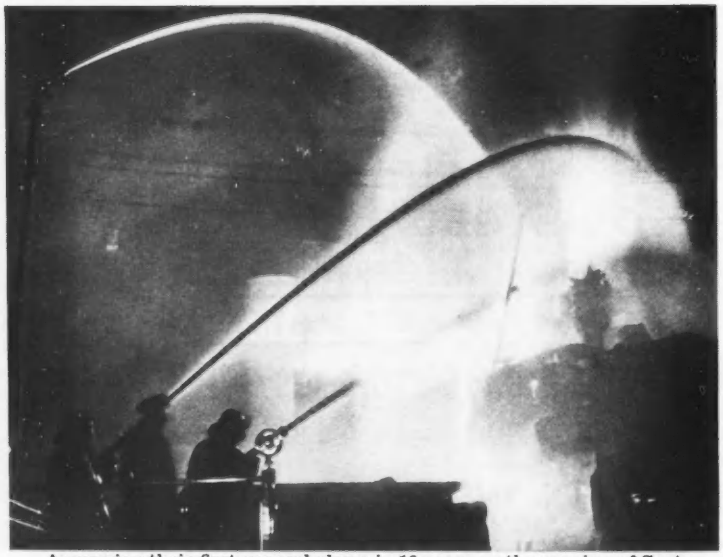
Sales and Engineering Offices in All Principal Cities

Tons of Water Each Minute!

Pictures Inc.

This fire in a Baltimore electrical supply warehouse would normally have required but a few gallons of water from sprinklers for extinguishment. In their absence the services of 349 firemen and 46 pieces of apparatus were required. Parked automobiles and narrow streets greatly handicapped fire fighting operations which were largely carried on from the roofs of adjoining buildings after firemen were driven from the burning building.



Answering their first general alarm in 16 years on the evening of September 28, 1937, firemen of Minneapolis, Minn. experienced a loss of nearly $600,000 when fire followed a series of dust explosions in the elevator of the Archer Daniels Midland Co. Inadequate water mains and insufficient hydrants handicapped fire fighting operations.

Even Heaven Not Safe With Wooden Shingle Roof

THE volunteer firemen of Kingston, N. Y., had always heard that it was not Heaven but another place where they would encounter much smoke and flame. Last month the Kingston firemen fought a fire in Heaven with the active opposition of the angels.

The "Heaven" destroyed was one of those operated by Father Devine, negro cult leader. The fire occurred on November 7 while fifty Harlem "angels" were at dinner in a massive 80-room Kingston mansion. The fire started when sparks from a fireplace chimney ignited the wooden shingle roof of the once imposing structure.

Reports indicated that the firemen didn't get much cooperation from the "angels." One of them particularly objected to a fireman who was smoking a pipe, a practice apparently not permitted in "Heaven". Firemen were greeted with the cry, "Let 'er burn, Father will build a better one!"

Regardless of the difficulties encountered by the firemen at this blaze they should derive considerable satisfaction out of the distinction of being "the fire fighters of the celestial sphere".

The fire ended up with a loss of approximately $300,000. The N.F.P.A. has long contended that wooden shingle roofs are not safe. Not even in Heaven!

△ △ △ △ △

Discussion Subject

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Q. What precautions are generally observed in connecting a hydrant line?

A. The hose should be secured so that it will not pull away when the apparatus lays the line. Always take necessary hydrant wrench and hydrant gate from the apparatus. Do not turn on the water before the signal is given. For full discussion see page 10.

A Problem Question
FOR DECEMBER

Suggested for discussion at company and department meetings this month

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How does the friction loss in 1½-inch hose compare with that of 2½-inch hose?

Watch for the answer in the next issue of VOLUNTEER FIREMEN

AHRENS-FOX AWARDED CONTRACT FOR FIVE PUMPERS BY NEW YORK WORLD'S FAIR!

Intensive Investigation Brings Out Facts of Ahrens-Fox Long and Successful Records Under Extraordinary Demands of World's Greatest Metropolis

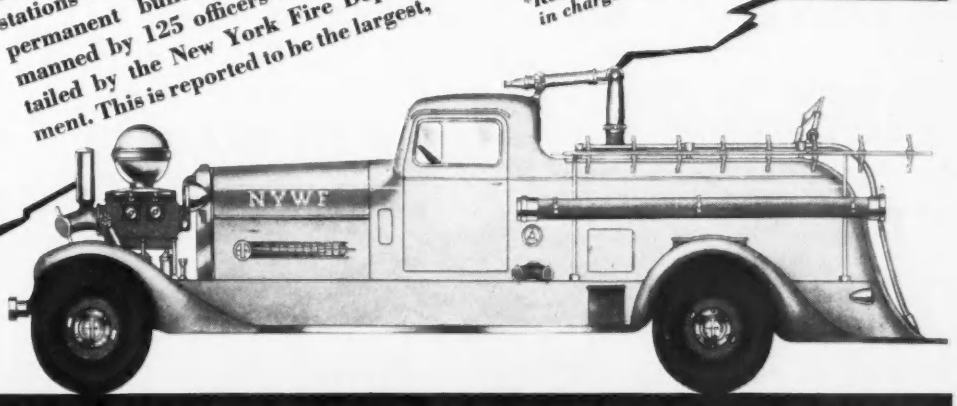
After an intensive investigation, a contract for five units of apparatus to be built according to specifications prepared by Chief T. F. Dougherty* and approved by Chief and Commissioner John J. McElligott has been awarded by the New York World's Fair to The Ahrens-Fox Fire Engine Company of Cincinnati.

These units will be housed in four stations — one of them an $80,000 permanent building — and will be manned by 125 officers and men detailed by the New York Fire Department. This is reported to be the largest, most completely equipped and highly trained semi-public Fire Brigade ever organized.

City of New York Also Awards Contract for 20 Ahrens-Fox H. P. Piston Pumpers

The World's Fair order for five Ahrens-Fox units follows closely the recent award by the City of New York, itself, for 20 more Ahrens-Fox Piston Pumping Engines of the type which has established a long and successful record under the extraordinary conditions demanded by this great metropolis. They are the last word in "Modern Equipment for Modern Firefighting".

**Retired Assistant Chief F.D.N.Y. — Now in charge of World's Fair fire protection*



If your community, too, needs fire fighting equipment, you will serve the interests of your constituents best by getting in touch with Ahrens-Fox.

AHRENS-FOX BUILDS EVERY TYPE OF PUMP FOR EVERY KIND OF SERVICE! *The Ahrens-Fox Fire Engine Co., Cincinnati, O.*

Taking a Hydrant

Quick Hydrant Hook-Ups Don't Come By Chance—Constant Drill at Proper Methods Is Necessary to Prevent Fumbling

WHEN fire apparatus pulls up to a blaze which has passed the booster line stage, how long does it take to get a big line in operation? To a large extent that depends upon how well drilled the hose crew is in the work of taking a hydrant and laying a line.

When the big line is needed it is wanted in a hurry. In many cases, where a hydrant is available which can give adequate pressures, the common practice is to make the first line a direct hydrant stream without stopping to hook up the pumper. After laying the first line the pumper may use its booster equipment or return to the hydrant to supply a second line depending upon the extent of the fire.

While practices followed in making direct hydrant connections may vary in different localities, there are a few pointers which every fireman should have in mind so that there will be no slip-ups which will prevent a quick hook-up.

While it is natural to want to make good time in laying a line it must always be insisted that the apparatus be SLOWED down sufficiently to allow the hydrant man to get off safely with the necessary hose and hydrant tools. There is nothing gained by making a man jump off when the apparatus is moving so fast that he is likely to lose his footing and become injured.

AS SOON as the hydrant man gets off the apparatus he makes a complete loop around the hydrant barrel with the hose, crossing the line on the ground. His foot is then placed on the hose, where it crosses, so that it will not be pulled away from the hydrant when the apparatus starts laying the line. Most departments find it desirable to have the top layer of hose packed rather loosely in the apparatus body in order that the hose will play out readily with less likelihood of being pulled away from the hydrant.

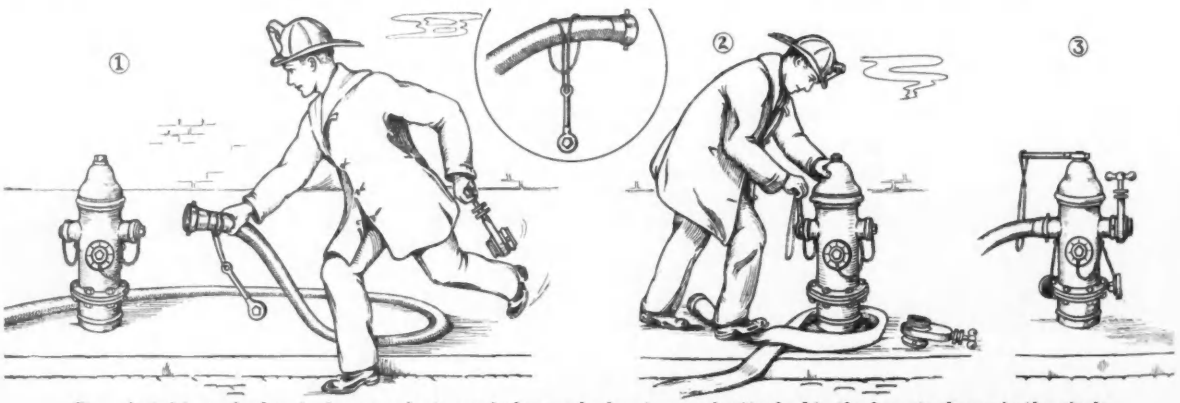
While the above method is commonly employed, an alternative method, using a rope with loops spliced at both ends, is favored in Detroit. One loop is large enough to fit around the hydrant and the other is looped around the hose with a hitch. The hydrant man simply throws the large loop over the hydrant and is then free to move about and do whatever else is necessary without remaining with one foot on the hose until the line has been stretched. The rope should be attached far enough back of the coupling to allow ample slack hose for an easy connection. Another practice common in many departments is to carry an extra 50-foot section of hose in a "doughnut" roll on the top of the regular load. This is the first section pulled off the truck and provides ample slack for the hydrant man.

When the hydrant man leaves the apparatus he must always take a hydrant wrench with him as without it he might be unable to remove the hydrant outlet caps and could not turn on the water. A practice common in many departments, which usually lay the hose from the hydrant to the fire, is to keep the hydrant wrench tied to the end of the hose which is to be wrapped around the hydrant.

The first connection is usually made to the hydrant outlet nearest to the fire. Before the water is turned on another 2½-inch outlet is gated in order that a second line may be connected without shutting down the hydrant. Many fire departments follow the desirable practice of placing a gate valve on every direct hydrant line, whether the first or second. Where lines are usually laid from the hydrant to the fire, the gate valve for the first line may be carried attached to the end of the hose which connects to the hydrant. Obviously on apparatus loaded to lay hose from the fire to the hydrant the gate valve and hydrant wrench would be carried separately rather than attached to the line.

By the time the line is laid the hydrant man should have his connections made and be ready to turn on the water as soon as the command is given. Care should be taken never to charge the line before the nozzle is attached or before the line has stretched to the point of operation because time may be lost if the line is charged too soon and there is the possibility that the hosemen may be injured.

Acknowledgement is made of helpful suggestions in the foregoing article made by H. J. Callahan, Chief of Training School, Detroit Fire Department; J. Ray Pence, Chief, Fire Department, Stillwater, Oklahoma; and J. Burr Taylor, Secretary, Annual Instructor's Conference, Western Actuarial Bureau.



Steps in taking a hydrant. A convenient way to keep a hydrant wrench attached to the hose is shown in the circle.

They LOST this FIVE-HOUR BATTLE IN THE FIRST FIVE MINUTES!

No fault of the fire department—the outcome *was decided before they were summoned*

JUST another proof of the fireman's axiom that "the first five minutes at a fire are worth the next five hours!" Catch a fire when it starts, and the chances are it will be extinguished with trivial damage. But when discovery is belated . . . when the alarm is delayed . . . the fire department usually faces an insurmountable handicap.

That is why any modern fire protection system, to be effective, must provide for prompt discovery and alarm no matter where in the building or at what hour of the day or night fire may break out. And the only truly effective way to assure this is through a system which detects and reports fire *automatically.*

With Aero Automatic Fire Alarm System protecting the premises, fire will not get a head-start. Aero detects fire when it is a small blaze, and automatically summons the fire department direct to the premises. Aero is easy to install, inconspicuous in appearance, adaptable to any size or type of building. No capital outlay is required for installation. Write for complete information.

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A NATION-WIDE PROTECTION SERVICE AGAINST FIRE, BURGLARY AND HOLDUP

"THE NEW" FYR-FYTER PUMP TANK

A Revelation in Pump Tank Efficiency

Labeled by Underwriters' Laboratories, Inc.

Write for complete description of this new, sturdily built, powerful, easily operated, Fyr-Fyter Pump Tank. — The acme of perfection in Pump Tank construction.

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If you are interested in selling approved fire protection devices either as a part-time addition to your present income or as a permanent vocation, send for complete details to

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These 6 STAR FEATURES CAN BE FOUND ONLY IN THE ELKHART Mystery FOG NOZZLE

No other nozzle has them all!

1. Rubber bumper insures continued effectiveness as fog nozzle . . . protects against blows which may bend barrel and render it useless.
2. Smooth action; will not bind or jam.
3. Complete shut-off; will not leak.
4. No holes to clog.
5. No engagement screw to fall out and cause loss of nozzle control.
6. Leak-proof packing compensates for wear.

These features are important.

For your own protection, see that the fog nozzles you buy are genuine Elkhart Mystery Nozzles.

MADE in SIX SIZES for ALL CONDITIONS.

Write today for illustrated folder.

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Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

Published by the National Fire Protection Association, a voluntary non-profit organization, 60 Batterymarch Street, Boston, Massachusetts, U.S.A. Franklin H. Wentworth, Managing Director. Percy Bugbee, Assistant Managing Director. Horatio Bond, Managing Editor.

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Volume 4 **December, 1937** Number 12

On the Right Track There was a time when it was generally believed to be impractical to expect volunteer departments to be interested or give any thought to fire prevention work. It was thought sufficient for them to merely drown out any fire which should occur. Gradually, however, volunteer departments have come to realize that there is no more effective way to extend their prestige than to act as counselors for their community in the matter of common fire hazards.

Inspection campaigns are a regular part of the work of many volunteer fire departments. Many of these departments which have analyzed their local fire problems are still not satisfied. They have modern apparatus, their men are well trained at fire schools, they conduct fire prevention campaigns but still find that they are having serious fires which they know are preventable. Not only are these fires preventable but in many cases, in spite of prompt response and efficient fire fighting, large losses result which may be wrongly interpreted by outsiders as due to poor fire fighting.

In studying this problem progressive departments are coming to the correct conclusion that such fires are the direct result of building construction which, while it may otherwise include good materials and workmanship, ignores essential fire protection features. Such structural deficiencies are a special problem of suburban communities usually protected by volunteer departments because such communities frequently do not have the advantages of modern building codes more common in larger cities.

Now that volunteer firemen are well trained and informed as to fire hazards they are no longer content to wait for fires. An example of intelligent action designed to eliminate the structural deficiencies responsible for many serious fires is reported from Maryland where the Montgomery County Association of Volunteer Firemen has voted to make "the general tightening of county building regulations to eliminate fire hazards" their principal objective next year.

Structural deficiencies common in suburban areas are lack of fire stopping in floor and wall spaces permitting the rapid spread of fire unseen throughout a building; defective chimney construction not having proper supports and lacking suitable flue lining; and substandard electrical wiring which ignores the safety provisions required by the N.F.P.A. National Electrical Code.

New Departments Enjoy Membership Many of the departments recently enrolled have found N.F.P.A. membership so valuable that they have written expressing regrets at having failed to take advantage of the Volunteer Firemen's Section long ago. Last month 8 departments with 170 men joined the Section for the first time. In addition 31 fire departments with 704 men renewed membership bringing the total for the Section to 560 departments and 12,507 firemen. The following departments are newly enrolled:

Lomita Park Fire District, Lomita Park, California.

Thayer Fire Department, Thayer, Missouri.

Genoa Volunteer Fire Department, Genoa, Nebraska.

Excelsior Fire Engine Company, Pearl River, New York.

East Bethlehem Township Volunteer Fire Company, Fredericktown, Pa.

North Augusta Fire Department, North Augusta, South Carolina.

Sisseton Fire Department, Sisseton, South Dakota.

Salt Lake County Fire Department No. 2, Magna, Utah.

For a Christmas present of year round value to the entire department we suggest N.F.P.A. membership.

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Membership Plan

Volunteer Firemen's Section, National Fire Protection Association

INDIVIDUAL membership in the National Fire Protection Association costs $10 per year. The membership plan for the Volunteer Firemen's Section is designed to give each fire company the advantages of N.F.P.A. membership. The fire company, as a member, receives at its headquarters a complete set of all regular N.F.P.A. literature, including the *Quarterly* magazine, as issued. In addition, as a special service to the Volunteer Firemen's Section, each fire company holding N.F.P.A. membership is entitled to have copies of the magazine VOLUNTEER FIREMEN sent to the home addresses of 20 firemen each month. If more than 20 firemen want to receive the magazine, an additional 50 cents should be sent in with the membership fee for each fireman in excess of 20 listed on the application blank.

Perhaps the simplest way to finance membership is to vote the annual dues from the company treasury. Other departments not wishing to take the money out of their treasury collect 50 cents from each man who is to receive VOLUNTEER FIREMEN until at least the minimum company membership fee of $10 is reached.

COMPANIES having less than 20 members frequently find outsiders who are interested and will pay 50 cents, or each fireman may put in a little more to make up the $10 for the company. In some cases a civic organization interested in the fire department may be willing to contribute all or a part of the dues so that the department may receive the advantages of belonging to the N.F.P.A. The N.F.P.A. does not specify which of the above methods may be used in financing membership. Just send in the annual dues with the names and addresses of the firemen who are to receive VOLUNTEER FIREMEN.

NEW CATALOGUES

This department is for the convenience of readers who wish to be advised of new products or services in the fire field. When writing for catalogues please mention VOLUNTEER FIREMEN.

Acme Protection Equipment Company, Inc., Koppers Building, Pittsburgh, Pa., 4 page 2 color illustrated bulletin describing "full vision gas masks".

American Fire Hose Co., Passaic, N. J., Two colored folder describing Lin-Lined fire hose.

American-Marsh Pumps, Inc., Battle Creek, Mich. Bulletin No. 75 (Edition No. 4). Data on Barton pumps and fire streams.

The Automatic Hose Coupling Co., 118 Central St., Waltham, Mass., Folder describing "Featherweight" (aluminum alloy) and "Automatic" Couplings.

W. S. Darley and Co., 2810 Washington Blvd., Chicago, Ill. 100-page catalogue "Everything for Fire Departments," describing a complete line of fire apparatus and pumps.

Federal Electric Co., 8717 South State St., Chicago, Ill. Bulletin No. 55. Complete details of Federal sirens.

Elkhart Brass Manufacturing Co., 1302 West Beardsley Ave., Elkhart, Ind. Catalogue F, covering complete line of fire protection brass goods, hose fittings, nozzles, extinguishers.

The Fyr-Fyter Co., Dayton, Ohio. Four-page illustrated leaflet, describing 5-gallon farm fire extinguisher (new shape hand pump type with anti-freeze charge. Labeled by Underwriters' Laboratories, Inc.)

Gamewell Co., Newton Upper Falls, Mass. "Vitaguard," a manual, 40 pages. A complete description of the Vitaguard fire alarm system for volunteer fire departments and industrial plants.

Walter Kidde and Company, Inc., 140 Cedar St., New York City. Illustrated brochure "Lux Makes the Difference" and 4 page bulletin "Instant Death to Any Fire" describing Lux fire extinguishers.

Koehler Mfg. Co., Marlboro, Mass. Full information on Wheat Spotlight, a light weight 25,000 candlepower spotlight or floodlight for firemen.

Mine Safety Appliances Co., Braddock, Thomas and Meade Sts., Pittsburgh, Pa. Four-page bulletin describing MSA H-H Inhalators, and bulletin on MSA "Anatomical Shirt" for first aid instruction.

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Outstanding Features are — Simplicity . . . Low Initial and Maintenance Costs . . . Rugged Construction . . . Automatic Operation of Alarm Equipment . . . May be Installed by Local Electrician

Schematic Diagram
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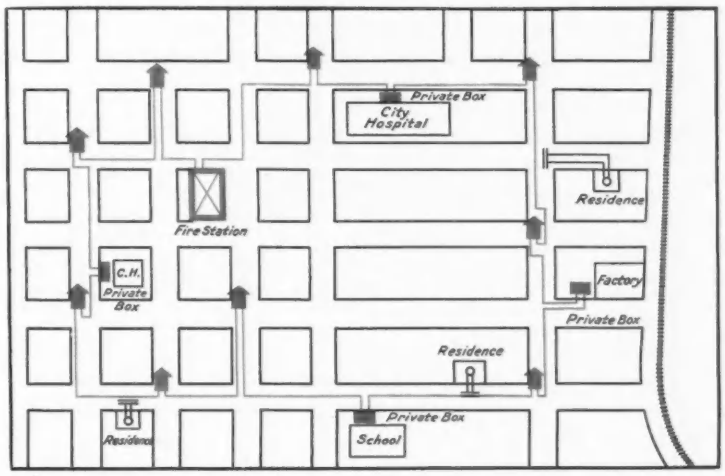

The diagram shows a typical Vitaguard System. The Red line indicates the path of the simple wire circuit connecting all elements of the system with the fire station including the necessary essentials of a Fire Alarm System for a volunteer fire department, namely:

1. **Fire Alarm Boxes so located as to be readily accessible from all points of fire hazard.**
2. **Public Alarm Equipment of great sound penetration, speed, and reliability—automatically controlled by the fire alarm boxes for directing the firemen to the scene of fire.**
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Christmas Fire Hazards

CHRISTMAS is a time of merriment and happiness for all. Even the worst old "Serooge" is expected to soften his heart for the holiday season. In many communities the fire department is close to the center of the community festivities. Frequently the department provides a community Christmas tree or plays host to the children of the municipality in a Christmas party at which toys collected by the firemen are distributed.

In addition to promoting various forms of entertainment and celebration, the fire fighters have an even more important part in the Christmas program. They are guardians of the safety of their community against fire hazards which unfortunately may accompany the holiday season.

When a fireman speaks of "Christmas fire hazards" most people instinctively think of Christmas tree fires. It is well that they should because these attractive seasonal decorations figure in hundreds of fires each year. However, there are other hazards perhaps equally serious during the holidays. Last year the worst Christmas fire tragedy occurred at a country club at Selma, Alabama. As reported in the February 1937 issue of VOLUNTEER FIREMEN, 6 young society women were burned to death when their cotton trimmed costumes ignited as someone struck a match in their midst. All flammable holiday decorations, whether used as costume ornaments or as imitation snow, should be fireproofed. All too often it has been reported that a "Santa Claus" was burned seriously or fatally when his cotton trimmed clothing or imitation whiskers ignited.

Another form of holiday celebration common in many parts of the country is the use of fireworks. It should be remembered that the private use of fireworks is no more safe at Christmas or New Years than on July 4th.

The final warning which firemen will give is to be careful with holiday electrical displays including Christmas tree lights. Care should be taken to see that all wiring is in good condition and that circuits are not overloaded. It is generally good practice not to leave electrical equipment running unattended as it is likely to cause a fire.

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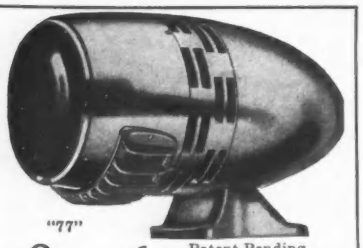

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DOUBLETONE
LONG ROLL SIREN
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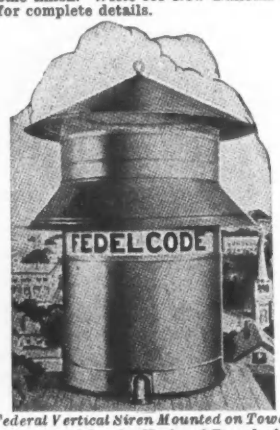
Here is a siren with two distinct tones—a high, piercing tone to penetrate closed cars with a shriek for instant action—and a low, carrying tone that clears traffic for blocks ahead. To add to the carrying power, the frequencies of the two tones cross at regular intervals to produce an extra weighted beat that rolls ahead like the third wave at the seashore. You get two tones and triple power! And combined with this are the features of our famous C-5 Coaster Siren—the brilliant red or green flashing light beam, enabling traffic to both SEE and HEAR your warning—long roll of more than TWO MINUTES after current is shut off—grease sealed ball bearing motor—all-chrome finish. Write for New Bulletin No. 56 for complete details.



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Write for Bulletin No. 55 for complete details.

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Bring Home $10.00 Easy Money

Pyrene Prize Letter Contest Pays for Stories of Good Work Done by Firemen With Extinguishers

FIREMEN know better than anyone else what fire extinguishers can do and that is why the Pyrene Prize Letter Contest is right up their alley. You may know of a case where an extinguisher saved a life or made a good stop. Fancy letter writing is not necessary, just tell the facts your own way. Having won a previous prize does not bar you from entry in the contest which is sponsored jointly by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN. The first prize story this month reports a fire where a farm was saved because the municipality encouraged farmers to own extinguishers and provided free refills.

FIRST PRIZE — $10.00

WM. J. DEACON,
Fire Dept., Lachute Mills, Quebec

Extinguishers Save Farm

"We received a call for help about 2 o'clock one morning to a barn that had been struck by lightning, located seven miles out of town. When we got there the barn was burned down, but, much to our surprise, the granary, house and sheds were still standing. They were very close to the barn. It would have been considered a good stop for any small pump, but there was only a well and the municipal secretary was there with a large case of extinguisher refills and was busy recharging fire extinguishers.

Each neighbor had brought his fire extinguishers for which the municipal council supplies free all the refills needed. There is no doubt that this farmer owes the saving of his granary, house and sheds to the use of those fire extinguishers."

SECOND PRIZE — $3.00

GERALD D. BROWNE
Fire Department, Albany, Calif.

Foam Extinguisher Saves Child

"One Sunday afternoon the captain answered the phone to hear a woman excitedly exclaim, "Please hurry, my child is trapped and I fear badly burned." Obtaining the address we quickly responded and upon arriving found that a child about 7 years of age was trapped in a corner of the laundry room. A large tub filled with a flammable fluid that had been used for cleaning, was shooting flames which mushroomed from the ceiling in all directions. The father had thrown a bucketful of water on the fire from the doorway spreading the blazing fluid in all directions.

As customary we entered the building with a foam extinguisher and a small line. The chief instantly ordered the use of the foam extinguisher. The blanket of foam quickly spread over the flaming fluid making it possible for the child to be removed and transported to a hospital for treatment of burns. The water line was then used to extinguish the ceiling rafters and burning walls. The chief then explained to the parents how detrimental the use of water was upon a fire of that type whereas the foam extinguisher quickly handled the situation."

THIRD PRIZE — $2.00

EDMUND F. TIERNEY, *Deputy Chief,*
Fire Department, Randolph, Mass.

Saves Business Block

"A short time ago we received a call for a fire in a market in the largest block on the main street. Apparently someone dropped a cigarette in a waste basket in the office. While the fire department was being called by telephone, the owner took a 2½-gallon soda-acid extinguisher and played it on the fire just as it was breaking through the ceiling to go to the second floor. Had he not had this extinguisher handy this fire would have resulted in serious damage. Instead the damage was held to $95."

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

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